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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/778,895

Filing Date: February 08, 2001

Appellant(s): YAMADA, JIRO

Bruce H. Bernstein
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/05/2004.

Art Unit:

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

Claim 9 is not rejected under 35 U.S.C 103.

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(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-14 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *ClaimsAppealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

6,320,829 Matsumoto et al. 11-2001

(10) *Grounds of Rejection*

As necessary and due to the arguments presented in the Appellant's brief the Examiner provides further rationale in support of the rejection set forth in prior Action, Paper No. 9, mailed August 11, 2003.

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the

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international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 3-5,7-11,13 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsumoto et al. U.S. Patent No. 6,320,829.

Regarding claim 1, Matsumoto et al. discloses a multimedia copy control system for controlling a copy of a digital data recording medium in which digital audio data is stored and from which the digital audio data is reproduced and recorded to another recording medium for copying (See Abstract; Fig. 1),

wherein the digital audio data stored in the digital data recording medium includes a first copy control information of a digital format (See col. 2, lines 42-44; col. 9, lines 33-42)

and a second copy control information of an analog embedded format (See col. 2, lines 46-48; col. 9, lines 33-42), said system comprising:

an encryption decoder configured to decrypt reproduction output data from the digital data recording medium to judge whether the reproduction output data is encrypted data (See col. 7, line 67 to co. 8, line 1-30; col. 8, line 65 to col. 9, line 14; Fig.2-#12,3-# 25);

a first copy control detector configured to detect the first copy control information from the decrypted reproduction data (See col. 9, lines 7-10; Fig. 3, block #28);

a contents data decoder configured to extract the digital audio data from the decrypted reproduction data (See col. 9, lines 18-21; Fig. 3, block #25); and

a second copy control detector configured to detect the second copy control information from the extracted digital audio data (See col. 9, lines 7-10; Fig. 3, block #27),

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wherein encryption of the reproduction output data from the recording medium is decrypted and judged for each digital contents unit under reproduction (See Abstract, col. 7, line 67 to col. 8, line 30; col. 8, line 65 to col. 9, line 14; Fig.2-#12,3-# 25), and

when said first copy control detector detects the first copy control information, the reproduction of the digital audio data is controlled based on the first copy control information (See col. 2, lines 1-44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table), and

when said first copy control detector detects no first copy control information, the reproduction of the digital audio data is controlled based on the second copy control information (See col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table, "Analog input").

Regarding claim 3, Matsumoto et al. discloses that the recording medium stores the first and second copy control information being allocated in pair for each digital contents unit (See Abstract, col. 7, lines 7-16, col. 7, line 67 to col. 8 lines 1-5).

Regarding claim 4, Matsumoto et al. discloses an analog output controller configured to generate analog data from the extracted digital audio data (See col. 5, lines 25-29; Fig. 3, block #26);

digital output controller configured to convert the extracted digital contents data to a specified output format data to be generated therefrom; wherein the digital audio data outputted via said digital output controller includes both the first and second copy control information (See col. 9, lines 13-26), (col. 10, lines 26- 29, Table on col. 11); and

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the analog contents data outputted via said analog output controller includes only the second copy control information (See col. 5, lines 25-29; Fig. 3, block #26), (col. 10, lines 26- 29, col. 2, lines1-21; col. 15, lines 36-48; col. 11, Table, "Analog input")

Regarding claim 5, Matsumoto et al. discloses a multimedia copy control method for controlling a copy of a digital data recording medium in which digital audio data is stored and from which the digital audio data is reproduced and recorded to another recording medium for copying (See Abstract, col. 2, lines 25 –62),

wherein the digital audio data stored in the digital data recording medium includes a first copy control information of a digital format (See col. 2, lines 42-44; col. 9, lines 33-42) and

a second copy control information of an analog embedded format(See col. 2, lines 46-48; col. 9, lines 33-42) , said method comprising:

decrypting reproduction output data from the digital data recording medium to judge whether the reproduction output data is encrypted data (See col. 7, line 67 to co. 8, line 1-30; col. 8, line 65 to col. 9, line 14; Fig.2-#12,3-# 25);

detecting the first copy control information from the decrypted reproduction data; extracting the digital audio data from the decrypted reproduction data (See col. 2, lines 52-56; col. 9, lines 7-10); and

detecting the second copy control information from the extracted digital audio data (See col. 2, lines 52-56; col. 9, lines 7-10),

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wherein encryption of the reproduction output data from the recording medium is decrypted and judged for each digital contents unit under reproduction (See Abstract, col. 7, line 67 to col. 8 lines 1-5), and

when the first copy control information is detected, the reproduction of the digital audio data is controlled based on the first copy control information (See col. 2, lines 1-44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table), and

when the first copy control information is not detected, the reproduction of the digital audio data is controlled based on the second copy control information (See col. 2, lines 1-44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table, "Analog input"),

Regarding claim 7, Matsumoto et al. discloses an optical disk reproduction device for reproducing an optical disk in which digital audio data is stored and from which the digital audio data is reproduced for copying (See Abstract, col. 3, lines 35-36; Fig. 3),

wherein the digital audio data stored in the optical disk includes a first copy control information of a digital format (See col. 2, lines 42-44) and

a second copy control information of an analog embedded format (See col. 2, lines 46-48), said reproduction device comprising:

a stream data extractor configured to extract stream data from the reproduction output data of the optical disk (See Fig. 3, block #21);

an encryption decoder configured to decrypt the extracted reproduction stream data to judge whether the reproduction stream data is encrypted data (See col. 7, line 67 to col. 8, line 1-30; col. 8, line 65 to col. 9, line 14; Fig. 2-#12,3-# 25);

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a first copy control detector configured to detect the first copy control information from the decrypted reproduction-stream data (See col. 9, lines 7-10; Fig. 3, block #28);

a contents decoder configured to extract and decode the digital contents data from the decrypted reproduction stream data (See col. 9, lines 18-21; Fig. 3, block #25);

a second copy control detector configured to detect the second copy control information from the extracted digital audio data (See col. 9, lines 7-10; Fig. 3, block #27);

an analog output controller configured to output analog contents data from the extracted digital audio data (See col. 5, lines 25-29; Fig. 3, block #26);

a digital output controller configured to convert the extracted digital audio data to a specified output format data to be generated therefrom (See col. 9, lines 13-26), (col. 10, lines 26- 29, Table on col. 11; Fig. 3, block #26); and

a system configured to receive the first and second copy control information and controls said analog output controller and said digital output controller (See col. 9, lines 13-26), (col. 10, lines 26- 29, Table on col. 11; Fig. 3, block #26);

wherein encryption of the reproduction output data from the optical disk is decrypted and judged for each digital contents unit under reproduction (See Abstract, col. 7, line 67 to co. 8, line 1-30; col. 8, line 65 to col. 9, line 14; Fig.2-#12,3-# 25), and

when said first copy control detector detects the first copy control information, the reproduction of the digital audio data is controlled based on the first copy control information (See col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table), and

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when where said first copy control detector detects no first copy control information, the reproduction of the digital audio data is controlled based on the second copy control information (See col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table, "Analog input"),

Regarding claim 8, Matsumoto et al. discloses when a reproduction permission condition is not met, said system controller controls said analog output controller and said digital output controller to restrict the reproduction based on at least one of the first and second copy control information (See col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table),

Regarding claim 10, Matsumoto et al. discloses a digital audio data outputted via said digital output controller includes both the first and second copy control information (See col. 9, lines 13-26), (col. 10, lines 26- 29, Table on col. 11; Fig. 3, block #26); and the analog contents data outputted via said analog output controller includes only the second copy control information (See col. 5, lines 25-29; Fig. 3, block #26; col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table, "Analog input").

Regarding claim 11, Matsumoto et al. discloses a digital data reproducing and recording system (See Fig. 1), comprising a connected combination of a recording medium reproduction device for reproducing digital data of a recording medium (See Fig. 3) and

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a recording medium recording device for recording the reproduced digital data to another recording medium, configured to control a multimedia copy of the recording medium (See Fig. 4),

wherein the digital audio data stored in the recording medium includes a first copy control information of a digital format (See col. 2, lines 42-44) and

a second copy control information of an analog embedded format (See col. 2, lines 46-48), said reproduction device comprising:

an encryption decoder configured to decrypt reproduction stream data output from the recording medium to judge whether the reproduction stream data is encrypted data (See col. 7, line 67 to col. 8, line 1-30; col. 8, line 65 to col. 9, line 14; Fig. 2-#12,3-# 25);

a first copy control detector configured to detect the first copy control information from the decrypted reproduction stream data (See col. 9, lines 7-10; Fig. 3, block #28);

a contents decoder configured to extract the digital contents data from the decrypted reproduction stream data (See col. 9, lines 18-21; Fig. 3, block #25);

a second copy control detector configured to detect the second copy control information from the extracted digital contents data (See col. 9, lines 7-10; Fig. 3, block #27),

an analog output controller configured to generate analog contents data from the extracted digital audio data (See col. 5, lines 25-29; Fig. 3, block #26); and

a digital output controller configured to convert the extracted digital audio data to a specified output format data to be generated therefrom, wherein, when said reproduction device and said recording device are digital-connected via said digital output controller, the digital audio data reproduced from said reproduction device includes both the first

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and second copy control information (See col. 9, lines 13-26), (col. 10, lines 26- 29,

Table on col. 11), and

when said reproduction device and said recording device are analog-c connected via said analog output controller, the analog contents data reproduced from said reproduction device includes only the second copy control information (See col. 5, lines 25-29; Fig. 3, block #26; col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table, "Analog input").

Regarding claim 13, Matsumoto et al. discloses a digital data recording medium adapted for multimedia copy control (See col. 2, lines 28-29), said recording medium comprising:

at least one data storage region storing digital audio data, which includes first copy control information of a digital format (See col. 2, lines 42-44) and

second copy control information of an analog embedded format (See col. 2, lines 46-48),

said at least one data storage storing said first and second copy control information allocated in pairs for each digital contents unit (See Abstract, col. 7, lines 7-16, (col. 7, line 67 to col. 8 lines 1-5),

wherein the digital audio data stored in the recording medium is adapted to be reproduced from the digital data recording medium so that the reproduced data is decrypted for use in judging whether the reproduction output data is encrypted data (See col. 7, line 67 to co. 8, line 1-30; col. 8, line 65 to col. 9, line 14; Fig.2-#12,3-# 25),

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the decrypted reproduction data being adapted for use in detecting the first copy control information (See col. 2, lines 52-56; col. 9, lines 7-10), and extracting the digital contents data therefrom (See Abstract, col. 7, line 67 to col. 8 lines 1-5), (See col. 9, lines 13-26), and the extracted digital audio data being adapted for use in detecting the second copy control information (See col. 2, lines 52-56; col. 9, lines 7-10),

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 6,12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. U.S. Patent No. 6,320,829.

Matsumoto et al. discloses all the limitations based on claims 1,5,7,11 and 13 as outlined above.

Matsumoto et al. discloses wherein the first copy control information includes three copy control states of copy free, copy permission with restriction and copy inhibition (See col. 4, lines 7-12; col. 10, lines 37-42; Table on col. 11), and in the case where the copy control state of the first copy control information is the copy free state, the reproduction is controlled to be inhibited (See Table on col. 11),

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and in the case of the copy permission with restriction and copy inhibition states, the reproduction is controlled to be permissive (See Table on col. 11),

and in the case where the copy control state of the second copy control information is the copy free state, the reproduction is controlled to be permissive (See Table on col. 11),

and in the case of the copy inhibition states, the reproduction is controlled to be inhibited (See Table on col. 11).

Matsumoto et al. does not expressly disclose wherein the second copy control information includes three copy states and in the case of the copy permission with restriction the reproduction is controlled to be inhibited.

However, discloses wherein the second copy control information includes two copy states of copy free and copy inhibition, and has the desirability and teaches of having a third state in which reproduction is controlled to be restricted as in the first control information (See col. 2, lines 1-22; col. 4, lines 12-16; col. 10, lines 37-39 (See col. 10, lines 37-39; Table in col. 11, (“11”, “00”)

It would have been obvious to one having ordinary skill in the art at the time of the invention to include a third state and in which reproduction is controlled to be inhibited or restricted, as suggested by Matsumoto et al.

(11) Response to Argument

Argument for claims 1, 5 and 7

Argument (page 9, starting last paragraph to page 12 line 12): Inconsistent combination of the teachings set forth in the Background and the Detailed Description of

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two different forms of copy restriction, e.g. Watermark and CCI. The Examiner disagrees.

The portions cited in col. 2, lines 1-21, teaches different forms of copy restrictions in which the first copy control, as well known to Matsumoto is a CCI (copy control information) and Electronic Watermarks (“Watermarks”). And Matsumoto et al. teaches and discloses “a first copy control information of a digital format (CCI)” and “a second copy control information of an analog embedded format (Watermark)”, as claimed in claim 1., (See col. 2, lines 25-44), Matsumoto et al. discloses wherein the copy control information indicating a copy restriction level, to main of data of the digital data recorded on the digital recording medium such that the main data contains a first portion containing at least one of picture information and voice information, and a second portion containing the copy control information, adding electronic watermark information to the second portion of the main data containing the at least one of picture information and voice information, hence the digital data contains the CCI and the digital data containing the second control information (“Watermark”). As recited portions in the above rejection (See col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table), when the system is connected using digital input/output, the digital data is transmitted and both control information CCI and Watermark are present and detected by the system, and when the system is connected by analog input/outputs the second copy control Watermark information is present, as being contained as an analog embedded format (“a second portion containing the copy control information, adding electronic watermark information to the second portion of the main data containing the at least one of picture information and voice information (audio)”),

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and transmitted while the first copy control information CCI is not present and is not detected by the system, since an analog inputs/outputs are used. For these reasons the Examiner has found no inconsistency or any unobvious combination in the reference as stated by Appellants.

Argument (page 14, line 13 to page 15, line 2): Matsumoto does not disclose or suggest "when said first copy control detector detects the first copy control information, the reproduction of the digital audio data is controlled based on the first copy control information, and when said first copy control detector detects no first copy control information, the reproduction of the digital audio data is controlled based on the second copy control information. The Examiner disagrees.

Matsumoto et al. discloses wherein the copy control information indicating a copy restriction level, to main of data of the digital data recorded on the digital recording medium such that the main data contains a first portion containing at least one of picture information and voice information, and a second portion containing the copy control information, adding electronic watermark information to the second portion of the main data containing the at least one of picture information and voice information, hence the digital data contains the CCI and the digital data containing the second control information ("Watermark"). As recited portions in the above rejection (See col. 2, lines 1-44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table), when the system is connected using digital input/output, the digital data is transmitted and both control information CCI and Watermark are present and detected by the system, and when the

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system is connected by analog input/outputs the second copy control Watermark information is present, as being contained as an analog embedded format (“a second portion containing the copy control information, adding electronic watermark information to the second portion of the main data containing the at least one of picture information and voice information (audio)”), and transmitted while the first copy control information CCI is not present and is not detected by the system, since an analog inputs/outputs are used.

Matsumoto discloses as claimed, when said first copy control detector detects the first copy control information, the reproduction of the digital audio data is controlled based on the first copy control information see for example col. 15 lines 8-9, reproduction is allowed if CCI is “11”.

Matsumoto discloses as claimed, when said first copy control detector detects no first copy control information, the reproduction of the digital audio data is controlled based on the second copy control information see col. 15 lines 36-48, digital reproduction/recording that employs transmission using analog signals, the system is connected by analog input/outputs and the second copy control Watermark information is present, as being contained as an analog embedded format (“a second portion containing the copy control information, adding electronic watermark information to the second portion of the main data containing the at least one of picture information and voice information (audio)”; col. 2, lines 25-44), and transmitted while the first copy control information CCI is not present and is not detected by the system, since an analog inputs/outputs are used.

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Argument(page 15, line 3 to col. 17, line 8): Matsumoto does not disclose or suggest controlling the reproduction of digital contents unit or a digital data recording medium when the analog input/output is used. The Examiner disagrees.

Matsumoto discloses in col. 15, lines 35-48, where control of reproduction and recording is not limitedly applied to the **digital data transmission system**, but suitably applied to a system of **digital reproduction /recording** that employ **data transmission using conventionally existing analog signals**. For example, as shown in Table, where an **analog input signal** is used as an input source, the system is connected by analog input/outputs to **reproduce/record digital data**, as clearly teaches by Matsumoto et al. and the second copy control Watermark information is present, as being contained as an analog embedded format (“a second portion containing the copy control information, adding **electronic watermark** information to the second portion of the main data containing the at least one of picture information and **voice information (audio)**”; col. 2, lines 25-44), and transmitted while the first copy control information CCI is not present and is not detected by the system, since an analog inputs/outputs are used.

Argument (page 17, line 9 to col. 22, line 10): Matsumoto does not disclose or suggest an decryption decoder and/or encoder configured to decrypt data. The Examiner disagrees.

Matsumoto et al. clearly disclose the watermark judging unit 27 and CCI judging unit 28 makes judgments or decisions on a watermark and a CCI, respectively, that are extracted from the demodulated data, and outputs the results of judgments to the output control unit 26. **These judgments may be made before or after signal decoding**, rather

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than during decoding wherein the discloses that the judgments are made before or after **decoding/decrypting** the digital audio data (See col. 9, lines 5-to col. 10, line 17; Figs. 2 and Fig. 3-**encoder/encrypter 12**). Matsumoto et al. disclose when said first copy control detector detects no first copy control information, the reproduction of the digital audio data is controlled based on the second copy control information see col. 15 lines 36-48, digital reproduction/recording that employs transmission using analog signals, the system is connected by analog input/outputs and the second copy control Watermark information is present, as being contained as an analog embedded format (“a second portion containing the copy control information, adding electronic watermark information to the second portion of the main data containing the at least one of picture information and voice information (audio)”; col. 2, lines 25-44), and transmitted while the first copy control information CCI is not present and is not detected by the system, since an analog inputs/outputs are used.

Argument (page 22, line 12 to page 24, line 7): Matsumoto does not disclose or suggest the features of claim 11. The Examiner disagrees.

Matsumoto discloses an analog output controller configured to generate analog contents data from the extracted digital audio data (See col. 5, lines 25-29; Fig. 3, block #26); and

a digital output controller configured to convert the extracted digital audio data to a specified output format data to be generated therefrom, wherein, when said reproduction device and said recording device are digital-connected via said digital output controller, the digital audio data reproduced from said reproduction device includes both the first

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and second copy control information (See col. 9, lines 13-26), (col. 10, lines 26- 29,

Table on col. 11), and

when said reproduction device and said recording device are analog-c connected via said analog output controller, the analog contents data reproduced from said reproduction device includes only the second copy control information (See col. 5, lines 25-29; Fig. 3, block #26; col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table)

Matsumoto discloses in col. 15, lines 35-48, where control of reproduction and recording is not limitedly applied to the **digital data transmission system**, but suitably applied to a system of **digital reproduction /recording** that employ **data transmission using conventionally existing analog signals**. For example, as shown in Table, where an **analog input signal** is used as an input source, the system is connected by analog input/outputs to **reproduce/record digital data**, as clearly teaches by Matsumoto et al. and the second copy control Watermark information is present, as being contained as an analog embedded format (“a second portion containing the copy control information, adding electronic watermark information to the second portion of the main data containing the at least one of picture information and voice information (audio)”; col. 2, lines 25-44), and transmitted while the first copy control information CCI is not present and is not detected by the system, since an analog inputs/outputs are used.

Argument (page 24, line 8 to page 25 line 16): Matsumoto does not disclose or suggest an decryption decoder and/or encoder configured to decrypt data. The Examiner disagrees.

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Matsumoto et al. as clearly disclose the watermark judging unit 27 and CCI judging unit 28 makes judgments or decisions on a watermark and a CCI, respectively, that are extracted from the demodulated data, and outputs the results of judgments to the output control unit 26. **These judgments may be made before or after signal decoding**, rather than during decoding wherein the discloses that the judgments are made before or after **decoding/decrypting** the digital audio data (See col. 9, lines 5-to col. 10, line 17; Figs. 2 and Fig. 3-ecnoder/encrypter 12). Matsumoto et al. disclose when said first copy control detector detects no first copy control information, the reproduction of the digital audio data is controlled based on the second copy control information see col. 15 lines 36-48, digital reproduction/recording that employs transmission using analog signals, the system is connected by analog input/outputs and the second copy control Watermark information is present, as being contained as an analog embedded format (“a second portion containing the copy control information, adding electronic watermark information to the second portion of the main data containing the at least one of picture information and voice information (audio)”; col. 2, lines 25-44), and transmitted while the first copy control information CCI is not present and is not detected by the system, since an analog inputs/outputs are used.

Argument for claims 3-4, 8 and 10:

Argument (page 26 line 1 to page 27 line 4): Matsumoto dos not disclose or suggest the features of claims 3-4, 8 and 10. The Examiner disagrees.

Matsumoto discloses in col. 15, lines 35-48, where control of reproduction and recording is not limitedly applied to the **digital data transmission system**, but suitably applied to a system of **digital reproduction /recording** that employ **data transmission using conventionally existing analog signals**. For example, as shown in Table, where an **analog input signal** is used as an input source, the system is connected by analog input/outputs to **reproduce/record digital data**, as clearly teaches by Matsumoto et al. and the second copy control Watermark information is present, as being contained as an analog embedded format (“a second portion containing the copy control information, adding **electronic watermark** information to the second portion of the main data containing the at least one of picture information and **voice information (audio)**”; col. 2, lines 25-44), and transmitted while the first copy control information CCI is not present and is not detected by the system, since an analog inputs/outputs are used.

(claim3) Matsumoto et al. discloses that the recording medium stores the first and second copy control information being allocated in pair for each digital contents unit (See col. 7, lines 7-16, col. 7, line 67 to col. 8 lines 1-5),

(claim 4) Matsumoto et al. discloses an analog output controller configured to generate analog data from the extracted digital audio data (See col. 5, lines 25-29; Fig. 3, block #26);

digital output controller configured to convert the extracted digital contents data to a specified output format data to be generated therefrom; wherein the digital audio data outputted via said digital output controller includes both the first and second copy control information (See col. 9, lines 13-26), (col. 10, lines 26- 29, Table on col. 11); and

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the analog contents data outputted via said analog output controller includes only the second copy control information (See col. 5, lines 25-29; Fig. 3, block #26), (col. 10, lines 26- 29, col. 2, lines1-21; col. 15, lines 36-48; col. 11, Table, "Analog input")

(claim 10), Matsumoto et al. discloses a digital audio data outputted via said digital output controller includes both the first and second copy control information (See col. 9, lines 13-26), (col. 10, lines 26- 29, Table on col. 11; Fig. 3, block #26); and

the analog contents data outputted via said analog output controller includes only the second copy control information (See col. 5, lines 25-29; Fig. 3, block #26; col. 2, lines 1- 44; col. 9, lines 3-26; col. 10, line 18 to col. 15 line 48; col. 11, Table, "Analog input").

Argument for claims 2, 6, 9, 12 and 14

Argument (page 27 line 14 to page 29 line 11): Matsumoto et al. does not disclose or suggest the features of claim 2, and the similar features of claims 6,9,12 and 14. The Examiner disagrees.

Matsumoto et al. discloses wherein the first copy control information includes three copy control states of copy free, copy permission with restriction and copy inhibition (See col. 4, lines 7-12; col. 10, lines 37-42; Table on col. 11), in the case where the copy control state of the first copy control information is the copy free state, the reproduction is controlled to be inhibited (See the 3th entry in the Table)

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and in the case of the copy permission with restriction and copy inhibition states, the reproduction is controlled to be permissive (See the 1st and 2nd entries in the Table),

and in the case where the copy control state of the second copy control information is the copy free state, the reproduction is controlled to be permissive (See the 6th entry in the Table),

and in the case of the copy inhibition states, the reproduction is controlled to be inhibited (See the 11th entry in the Table)

Matsumoto et al. does not expressly disclose wherein the second copy control information includes three copy states and in the case of the copy permission with restriction, the reproduction is controlled to be inhibited.

However, discloses wherein the second copy control information includes two copy states of copy free and copy inhibition, and has the desirability and teaches of having a third state in which reproduction is controlled to be restricted as in the first control information (See col. 2, lines 1-22; col. 4, lines 12-16; col. 10, lines 37-39 (See col. 10, lines 37-39; Table in col. 11, (“11”, “00”) (See col. 4, lines 12-16; col. 10, lines 37-39), as in the first copy control information.

Since the watermark (second control information) is easy to rewrite, is rather and difficult to permit only one-time copying by rewriting or changing the code, (e.g. “10” to “11”), as in the case of the CCI (first copy control information)

It would have been obvious to one having ordinary skill in the art at the time of the invention to include a third state and in which reproduction is controlled to be inhibited or restricted, by identifying unauthorized alterations in the second copy control information “Watermark”, as teaches by Matsumoto et al

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Art Unit 2655

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